



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/596,806	06/19/2000	Harry J. Buncke	540P	4594

7590 07/15/2003  
Thomas M Freiburger  
25th Floor  
650 California Street  
San Francisco, CA 94108

EXAMINER

FERKO, KATHRYN P

ART UNIT	PAPER NUMBER
----------	--------------

3743

DATE MAILED: 07/15/2003

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/596,806

Applicant(s)

BUNCKE, HARRY J.

Examiner

Kathryn Ferko

Art Unit

3743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: element 52. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The disclosure is objected to because of the following informalities: in the Description of the Drawings, the discussion of Figure 4 should either recite that it is prior art and/or refer to Figure 3. Additionally, on page 9, element 30 is referenced as triangular-shaped movable member, while on page 10, element 30 is referenced as hollow movable member. On page 10, element 52 is referenced as force-applying device, while on page 11, element 52 is also referenced as the remote device. Further on page 11, element 62 is referenced as tail end as well as proximal end. On page 12, element 64 is referenced as bell-shaped fitting as well as screw fitting. On page 15, element 92 is referenced as end cap and cylinder. For consistency and clarity, each element should only have one label and each label should only correspond to one element.

Appropriate correction is required for these and any other inconsistencies.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Since there are many surgical clip appliers, a novel feature of the invention should be included in the title.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art disclosed in the current applications (Figures 1-4) in view of Mayer in US Patent No. 6,221,083.

That considered prior art in the current application specification discloses a device (10) for applying non-penetrating clips to small blood vessels or other wound sites or tissue separation sites where suturing or other wound closure techniques would be impossible or undesirable having: a hand-held clip applier (10) having a handle (16) suitable for gripping in the hand of a surgeon; a clip storing and dispensing stem (14) extending from a forward end of the handle, the stem (14) having a tip (12) at a remote end, the tip (12) including means for dispensing and serially applying metal clips in non-penetrating engaging configuration against sections of tissue on either side of a wound or tissue separation to clamp the two sections of tissue together, upon the receipt of mechanical force to a clip-applying component of the stem, as recited on pages

8-10 of the current application specification and seen in figures 1-4; a movable member within the handle which, when caused to move by a force applied from outside the handle, is effective to cause movement of the clip-applying component in the stem so as to cause dispensing and application of a clip, as recited on pages 8-10 of the current application specification and seen in figures 1-4; linkage means engaged with the movable member within the handle and extending to a position in the handle capable of receiving a pushing force in the handle capable of receiving a pushing force from the exterior of the handle (that achieved via 18), as recited on pages 8-10 of the current application specification and seen in figures 1-4; and a handle that is round so as to be capable of comfortable hand gripping in any rotational orientation, as recited on pages 8-10 of the current application specification and seen in figures 1-4.

However, that considered prior art in the current application specification does not explicitly recite a flexible cable release device having a cable sheath, and an internal cable capable of delivering a compressive pushing force through the sheath, a thumb button at a remote hand-grippable end of the cable release, for applying a pushing force to slide the cable through the sheath so as to cause extension of a pusher tailpiece out of a proximal end of the cable sheath when the thumb button is pushed inward toward the sheath by a finger or thumb, the sheath at the proximal end having means for connection to the handle of the hand-held clip applier in a position to apply force to the linkage means in the handle by motion of the pusher tailpiece, thus advancing the clip-applying

component to dispense and apply a clip when the thumb button on the flexible cable release device is pushed, whereby the cable release device connected to the clip applier the hand-held clip applier can be held very steady in one hand with its tip under the microscope while the force to apply a clip is supplied at the remote end of the cable release device, avoiding any movement of the tip at the instant of the clip application; a flexible remote force-transmitting device having a tubular sheath, and an internal movable medium capable of delivering a compressive pushing force through the tubular sheath, a depressible actuator at a remote end of the flexible device for applying a pushing force to slide the movable medium through the sheath so as to cause extension of a pusher tailpiece out a proximal end of the tubular sheath when the actuator is depressed, the sheath at the proximal end being connected to the handle of the hand-held clip applier in a position to apply force to the linkage means in the handle by motion of the pusher tailpiece, thus advancing the linkage means and movable member within the handle, and thus advancing the linkage means and movable member within the handle, and thus advancing the clip-applying component to dispense and apply a clip when the actuator on the flexible force-transmitting device is depressed; a remote flexible force-transmitting device that has a threaded fitting at its proximal end, the tail end of the handle of the clip applier having a mating thread so that the flexible device is removable from the clip applier; a flexible force-transmitting device that has a cable release device, the movable medium having an internal cable in the tubular sheath and the

Art Unit: 3743

depressible actuator has a thumb button; a flexible force-transmitting device that has a hydraulic line having liquid as the movable medium, wherein the remote end of the flexible device has a piston and cylinder connected to put pressure on the liquid when the actuator is depressed to force the liquid through the hydraulic tube, the proximal end of the flexible device has a second piston and cylinder with the piston connected to the pusher tail piece so that the linkage means and the movable member are pushed forward hydraulically when the actuator is depressed; a depressible actuator that is a thumb button connected to the piston at the remote end of the flexible device.

On the other hand, Mayer teaches a flexible cable release device having a cable sheath (23), and an internal cable (33) **capable of** delivering a compressive pushing force through the sheath (23), a thumb button (37) at a remote hand-grippable end of the cable release, for applying a pushing force to slide the cable through the sheath so as to cause extension of a pusher tailpiece out of a proximal end of the cable sheath when the thumb button (37) is pushed inward toward the sheath by a finger or thumb, as recited in columns 5 and 6 and seen in figure 1, the sheath (23) at the proximal end having means for connection to the handle (100) of the hand-held applier in a position to apply force to the linkage means in the handle by motion of the pusher tailpiece, thus advancing the applying component (10) to dispense when the thumb button on the flexible cable release device is pushed, whereby the cable release device connected to the applier the hand-held applier **can be** held very steady in one hand with its tip

Art Unit: 3743

under the microscope while the force to apply is supplied at the remote end of the cable release device, avoiding any movement of the tip at the instant of the clip application, as recited in columns 5 and 6 and seen in figure 1; a flexible remote force-transmitting device having a tubular sheath (23), and an internal movable medium (33) capable of delivering a compressive pushing force through the tubular sheath (23), a depressible actuator (37) at a remote end of the flexible device for applying a pushing force to slide the movable medium through the sheath (23) so as to cause extension of a pusher tailpiece out a proximal end of the tubular sheath (23) when the actuator (37) is depressed, the sheath (37) at the proximal end being connected to the handle of the hand-held applier in a position to apply force to the linkage means in the handle by motion of the pusher tailpiece, thus advancing the linkage means and movable member within the handle, and thus advancing the linkage means and movable member within the handle, and thus advancing the applying component to dispense when the actuator (37) on the flexible force-transmitting device is depressed, as recited in columns 5 and 6 and seen in figure 1; a flexible force-transmitting device that has a cable release device, the movable medium having an internal cable (33) in the tubular sheath and the depressible actuator has a thumb button (37); a flexible force-transmitting device that has a hydraulic line having liquid as the movable medium, wherein the remote end of the flexible device has a piston and cylinder connected to put pressure on the liquid when the actuator is depressed to force the liquid through the hydraulic tube, the proximal end of the flexible device has a



Art Unit: 3743

second piston and cylinder with the piston connected to the pusher tail piece so that the linkage means and the movable member are pushed forward hydraulically when the actuator is depressed, within the scope of the invention as recited in column 7, lines 9-13; and a depressible actuator that is a thumb button (37) connected to the piston at the remote end of the flexible device, as seen in figure 1.

Therefore, it would be obvious to one with ordinary skill in the art to modify the prior art disclosed in the current application specification to provide the thumb actuator (37) and cables (23 and 33) as taught by Mayer for the purpose of having an actuation button remote from the handle (16 of the current application specification), thereby providing more stability to the system. Moreover, although not explicitly recited a remote flexible force-transmitting device that has a threaded fitting at its proximal end, the tail end of the handle of the tip applier having a mating thread so that the flexible device is removable from the clip applier would also be obvious to one with ordinary skill in the art, for to make integral or separable since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Further, the method would further be obvious to one with ordinary skill in the art, see apparatus rejection above.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure are as follows: US 2002/0165444; US 2002/0198541; US Patent

Art Unit: 3743

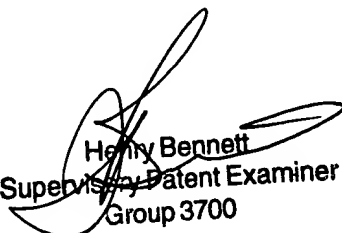
No. 6,533,157; US Patent No. 6,443,973; US Patent No. 5,868,761; US Patent No. 5,951,574; US Patent No. 5,720,756; US Patent No. 5,720,048; US Patent No. 5,258,007; US Patent No. 5,174,276; US Patent No. 4,646,745; and US Patent No. 4,488,523.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kathryn Ferko whose telephone number is (703) 306-3454. The examiner can normally be reached on M-F (7:30-5:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry A Bennett can be reached on (703) 308-0101. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9302 for regular communications and (703) 872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

KF  
June 27, 2003

  
Henry Bennett  
Supervisory Patent Examiner  
Group 3700